## CORRES. CONTROL

Originator Ltr Log #

ALP-036-98

DIST.	LTR	EM
BENSON, C.A.		
CARMEAN, C.H.		
CRAWFORD, A.C.		
DAWSON, D.		
EDWARDS, J.D.		
FINDLEY, M.E.		
FITZ, R.C.		
GUINN, L.A.		
HUGHES, F.P.		
REED, A.B.		
TYSON, A.M.		
WAGNER, M.J.		
WHEELER, M.		
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Hranac, K	$\checkmark$	
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LTR. NO. **Rocky Mountain** Remediation Services, L.L.C. . . . protecting the environment



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Flats Environmental Technology Site x 464

, Colorado 80402-0464 (303) 966-7000

June 8, 1998

Lane Butler Waste and Remediation Operations Kaiser-Hill Company T130C/RFETS

MINUTES FROM THE MAY 22, 1998 SOLAR PONDS PLUME STATUS MEETING -ALP-036-98

Attached are the minutes from the above referenced meeting. If you have any questions, please contact me at extension 4385.

Annette Primrose **ER Projects Manager** 

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X

Enclosure: As Stated

**AUTHORIZED CLASSIFIER** SIGNATURE:

CLASSIFICATION:

RMRS RECORDS

RF CORRES

PATS/T130G

CONFIDENTIAL SECRET

TRAFFIC

UCNI UNCLASSIFIED

10-8-98 IN REPLY TO RF CC NO .:

**ACTION ITEM STATUS:** PARTIAL/OPEN CLOSED

LTR APPROVALS:

ORIG. & TYPIST INITIALS:



ADMIN RECCAD

IA-B-000003

## Solar Ponds Plume Status May 22, 1998 EPA Conference Center Meeting Notes

**ATTENDEES:** Laura Brooks, Lane Butler, Gary Kleeman, Jeb Love, Elizabeth Pottorf, Annette Primrose, Carl Spreng, John Stover.

The meeting began with an overview of the new information on the Solar Ponds plume contaminant concentrations and extent. Draft plume maps were discussed.

Lane Butler followed by describing the original planned approach for this project:

- Alternative analysis
- Decision document
- Phase-in an alternative, leaving the Modular Storage Tanks (MSTs) in place until the action was proven to be effective.

All alternatives assumed that the MSTs were left in place.

Jeb Love felt that the ITS and MSTs were partially doing the job, and that an action would need to demonstrate 100% compliance before it was acceptable.

This would be very difficult to prove within the one year time frame available. Jeb felt that if in could be proven that the flux was increasing over the current baseline, then an action was not effective.

Carl Spreng commented that right now, the RFCA milestone would be completed if modeling or other efforts show that the chosen alternative is effective.

Lane Butler stated that the purpose of this meeting is to Brainstorm ideas to keep from wasting money on the MSTs, and move directly to a remedial action. The current ideas under consideration include: free release, Phyto, capping, surface water diversion, and/or staged phyto-remediation such as planting rooted trees followed by whips.

Elizabeth Pottorf felt that it would be easier to do brainstorm for a final action if there were modeling and flux data available. The other regulators seemed to agree. They felt that since the eastern tank was abandoned, the highest risk was mitigated for now.

Lane Butler spoke of the free release white paper which was completed in May 96 which projected free release nitrate concentrations of 80 mg/1 of in the stream. He also asked about phyto-remediation followed by capping of the Solar Ponds Area.

Jeb Love requested that RFETS look at the current loading of  $NO_3$  to the stream. He requested that RFETS check into sending the ITS water to the Sewage Treatment Plant (this suggestion was explained as currently in progress). The seasonal variation in concentrations may allow release into SFP. Are tanks useful, or use interim to ponds. He stated that the Sping freshet flow was needed to fix acceptable flux levels. He also felt that RFETS may have to stabilize the hillside to preserve habitat.



Gary Kleeman asked if RFETS could recirculate water the ITS water through ponds? However, this had been a public and regulatory problem in the past.

Elizabeth Pottorf asked about uranium in phyto-remediation? There is no real data available. She felt that back of envelope calculations of flux now will allow what if scenarios to be evaluated, and will be needed to check the groundwater model anyway.

Jeb Love felt that the stream values should be checked to see if natural attenuation is taking place.

Carl Spreng mentioned that trying to meet the RFCA milestone using free release and/or treatment at the Sewage Treatment Plant may not be easy sell to meet this milestone.

The vegetation survey results were discussed including the potential for some uptake to the leaves. Jeb Love mentioned that the results may be poor due to unwashed leaves, and that the role of bugs was greatly underestimated.

Phyto-remediation was discussed including the need to use native vegetation. Jeb Love felt that since Prebles Mice are known to migrate up to one mile, then there may be mice migration with the change in vegetation.

Lane Butler asked if there were any acceptable or detestable alternatives. Carl Spreng said that alternatives need to be run by stakeholders eventually. He asked if the water could go to the STP now? However, this is not possible until the study results currently in-progress are received.

Gary Kleeman asked about the current status of the MSTs. They are full except for the eastern tank which has a low volume in it. He would like to know the modeling results, how much water is under-flowing the current system, and what is the contribution from surface water infiltration and precipitation.

Elizabeth Pottorf asked why RFETS did not treat the water by reactive iron to remove uranium, then distribute the water for phyto-remediation? However she feels that the increased water volume may remobilize the uranium. Perhaps capture 500 pCi/1 zone of the plume only.

Both EPA and CDPHE agreed that if uranium and nitrate could be contained in a treatment cell, then this would meet the RFCA milestone.

Lane Butler asked if we could level the Solar Ponds, push in the berms, and reseed, would that meet the RFCA milestone? Jeb felt that more data were needed before this proposal could be evaluated.

Carl Spreng said that once the modeling information was received, then there was a possibility that an action could be done that would make a big impact, such as redirecting surface flow.

Jeb Lovefelt that a good understanding of flux changes was critical to evaluating the alternatives. He also felt that the water in the Solar Ponds must be sampled prior to making a decision about pushing in the berms later?

Lane Butler - Data on asphalt wanted for hot pond. Decision is really... can liners be left?

CDPHE wanted data on the contamination in the asphalt liners for the hot pond in order to make the decision of whether liners could be left in place. They reiterated that the remedial action must provide protection against exceedance at the Point of Compliance.

It was agreed that the surface water working group would be involved with this decision, and that as data is available, a SW working group meeting would be convened.

## **ACTIONS:**

- 1. Complete modeling
- 2. Continue looking at alternative analyses (reactive metals, iron very popular)
- 3. What is in asphalt?

Paperwork to Elizabeth Pottorf/JLove to allow them to be escorted into the protected area for a Solar Ponds Tour.